## 2004 Water Quality Assessment (Final) - Category 5 Listings for WRIA 18

WRIA	Listing ID Car	tegory	98 List?	Waterbody Name Basis	Location I	nformatio	n			Parameter Remarks	Medium
18	6972	5	Υ	BAGLEY CREEK	YM49RG	1.838	30N	05W	16	Fecal Coliform	Water
				Clallam County Water Quality Division data (submitted by Joel Freudenthal on 10/7/91) shows that 2 of 2 samples (100%) collected at Hwy 101 in 1991 exceeded the percentile criterion.							
18	42965	5	N	BELL CREEK	ZX80OY	0	30N	03W	22	Dissolved oxygen	Water
				Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Bell 0.1 shows 7 samples beyond the criterion collected on the following days: 1/17/2000, 10/1/2000, 7/28/2000, 8/12/2001, 9/30/2001, 8/15/2002, 10/17/2003.							
18	42966	5	N	BELL CREEK	ZX80OY	0.4	30N	03W	21	Dissolved oxygen	Water
				Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Bell 0.	8 shows 5 s	samples b	eyond	the cri	terion colle	ected on the following	

days: 10/3/2001, 8/15/2001, 1/20/2002, 1/20/2003, 10/17/2003.

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18

6973

5

Υ

CASSALERY CREEK

percentile criterion in 1991.

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Clallam County Water Quality Division data (submitted by Joel Freudenthal on 10/7/91) shows that 3 of 4 samples (75%) collected at the mouth exceeded the

JE42HJ

31N 03W 32

**Fecal Coliform** 

Water

WRIA	Listing ID Cat	egory	98 List?	Waterbody Name Basis	Location I	nformatio	n			Parameter	Remarks	Medium
18	21444	5	N	CASSALERY CREEK  Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Cassa criterion.	<b>JE42HJ</b> alery 0.6 sho	<b>0.679</b> ows in 200				Fecal Col		Water
				Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Cassa percentile criterion; in 2001, 3 of 3 samples (100.0%) exceeded the percentile criterion.	alery 0.5 sho	ows in 200	00, 3 of	3 sam	ples (100.0%) ex	ceeded the		
				Streamkeepers of Clallam County unpublished data show a geometric mean of 32 cfu/100m (Cassalery @Jamestown Rd.)	nL from 2 sa	mples col	lected i	n 2003	at station Cassa	lery 0.6		
				Streamkeepers of Clallam County unpublished data show a geometric mean of 899 cfu/100 (Cassalery @Jamestown Rd.).	mL from 2 s	amples co	ollected	l in 200	2 at station Cass	alery 0.6		
				Streamkeepers of Clallam County unpublished data show a geometric mean of 74 cfu/100m (Cassalery d/s of Jamestown Rd).	nL from 3 sa	mples col	lected i	n 2002	2 at station Cassa	lery 0.5		
				Streamkeepers of Clallam County unpublished data show a geometric mean of 20 cfu/100m (Cassalery @Jamestown Rd.).	nL from 1 sa	mples col	lected i	n 2001	at station Cassa	lery 0.6		
				Streamkeepers of Clallam County unpublished data show a geometric mean of 552 cfu/100 (Cassalery d/s of Jamestown Rd).	mL from 5 s	amples co	ollected	l in 200	01 at station Cass	alery 0.5		
				Streamkeepers of Clallam County unpublished data show a geometric mean of 274 cfu/100 (Cassalery d/s of Jamestown Rd).	mL from 5 s	amples co	ollected	l in 200	00 at station Cass	alery 0.5		
				Streamkeepers of Clallam County unpublished data show a geometric mean of 292 cfu/100 (Cassalery d/s of Jamestown Rd).	mL from 1 s	amples co	ollected	l in 199	99 at station Cass	alery 0.5		
18	6878	5	Υ	DRY CREEK	XN56VX	2.767	30N	07W	12	Temperat	ure	Water
				Elwha-Klallam Indian Tribal data (submitted by Michael McHenry on 9/10/93) show a 7-day between 7/92 and 9/92.	mean of ma	ıximum da	aily tem	peratui	res of 27.7 deg C	. at RM 2.5		
18	40383	5	N	DUNGENESS BAY	390KRD	48123E	1F5	48.15	55 123.155	Fecal Col	iform	Water
				Department of Health unpublished data collected from station DUNGENESS BAY-108 show samples exceed the percentile criterion with the last sample collected on 19-Dec-2001.	v a geometri	c mean o	f 6 cfu/1	100mL	and 7.14285714	285714% of		
				Department of Health unpublished data collected from station DUNGENESS BAY-110 show samples exceed the percentile criterion with the last sample collected on 19-Dec-2001.	v a geometri	c mean o	f 6 cfu/1	100mL	and 10.7142857	142857% of		
18	6579	5	N	ELWHA RIVER	PB56KA	11.657	30N	07W	28	Temperat	ure	Water
				Dept. of Ecology unpublished data from core ambient monitoring station 18B070 (Elwha R. 16.6 for mid-week 11 August 2001.; Hallock (2001) Dept. of Ecology Ambient Monitoring Stayours beyond the criterion out of 54 samples collected between 1993 - 2001	near Port Ar tation 18B07	ngeles) s 70 (ELWH	hows a A RIVE	7-day R NE	mean of daily ma AR PORT ANGEL	ximum values ( LES) shows 0	of	

excursions beyond the criterion out of 54 samples collected between 1993 - 2001

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WRIA Listing ID Category 98 List?			98 List?	t? Waterbody Name Basis		nformatio	n			Parameter Remarks	Medium
18	7023	5	N	<b>ELWHA RIVER</b> Serdar, 1999. excursions beyond the National Toxics Rule criterion in rainbow trout collected	<b>PB56KA</b> ed in 1999.	5.071	30N	07W	10	Total PCBs	Tissue
18	9924	5	N	MCALLISTER CREEK  JQ29HX  0.619  31N  03W  37  Fecal Coliform  Water  Sargeant (2002) station MC0.8 (MC0.8) shows the geometric mean of 13 does not exceed the criterion and that 0 % of the samples does not exceed the percentile criterion from 3 samples collected during 1999.; Sargeant (2002) station MC0.8 (MC0.8) shows the geometric mean of 66 does not exceed the criterion and that 19 % of the samples exceeds the percentile criterion from 16 samples collected during 2000.;  Sargeant (2002) station MC1.7T (MC1.7T) shows the geometric mean of 121 exceeds the criterion and that 31 % of the samples exceeds the percentile criterion from 13 samples collected during 2000.							
18	9925	5	N	MCALLISTER CREEK Sargeant (2002) station MC1 9 (MC1 9) shows the geometric mean of 32 does not exceed to	JQ29HX	2.754	31N			Fecal Coliform	Water

Sargeant (2002) station MC1.9 (MC1.9) shows the geometric mean of 32 does not exceed the criterion and that 0 % of the samples does not exceed the percentile criterion from 4 samples collected during 1999.; Sargeant (2002) station MC1.9 (MC1.9) shows the geometric mean of 119 exceeds the criterion and that 31 % of the samples exceeds the percentile criterion from 16 samples collected during 2000.;

Sargeant (2002) station MC2.0 (MC2.0) shows the geometric mean of 174 exceeds the criterion and that 33 % of the samples exceeds the percentile criterion from 9 samples collected during 2000.; ;

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Remarks

Water

## 18 21467 5 Ν PEABODY CREEK JY97IB 30N 06W 01 **Fecal Coliform** 0

Streamkeepers of Clallam County unpublished data show a geometric mean of 10 cfu/100mL from 1 samples collected in 2003 at station Peabody 0.2 (Peabody @ 2nd St).

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Peabody 0.3 shows in 2003, 2 of 4 samples (50.0%) exceeded the percentile criterion.

Streamkeepers of Clallam County unpublished data show a geometric mean of 212 cfu/100mL from 2 samples collected in 2003 at station Peabody 0.3 (Peabody @trailer park laundry).

Streamkeepers of Clallam County unpublished data show a geometric mean of 14 cfu/100mL from 2 samples collected in 2002 at station Peabody 0.0 (Peabody @ mouth).

Streamkeepers of Clallam County unpublished data show a geometric mean of 48 cfu/100mL from 4 samples collected in 2002 at station Peabody 0.2 (Peabody @ 2nd St).

Streamkeepers of Clallam County unpublished data show a geometric mean of 31 cfu/100mL from 2 samples collected in 2002 at station Peabody 0.3 (Peabody @trailer park laundry).

Streamkeepers of Clallam County unpublished data show a geometric mean of 631 cfu/100mL from 4 samples collected in 2001 at station Peabody 0.0 (Peabody @ mouth).

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Peabody 0.2 shows in 2001, 3 of 6 samples (50.0%) exceeded the percentile criterion; and a geometric mean of 278.78 from 6 samples exceeded the criterion.

Streamkeepers of Clallam County unpublished data show a geometric mean of 291 cfu/100mL from 7 samples collected in 2001 at station Peabody 0.2 (Peabody @ 2nd St).

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Peabody 0.2a2 shows in 2001, 2 of 2 samples (100.0%) exceeded the percentile criterion.

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Peabody 0.2a4 shows in 2001, 2 of 2 samples (100.0%) exceeded the percentile criterion.

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Peabody 0.2b shows in 2001, 2 of 2 samples (100.0%) exceeded the percentile criterion.

Streamkeepers of Clallam County unpublished data show a geometric mean of 26 cfu/100mL from 6 samples collected in 2001 at station Peabody 0.3 (Peabody @trailer park laundry).

Streamkeepers of Clallam County unpublished data show a geometric mean of 20 cfu/100mL from 1 samples collected in 2001 at station Peabody 0.4 (Peabody @ Peabody St culvert).

Streamkeepers of Clallam County unpublished data show a geometric mean of 32 cfu/100mL from 1 samples collected in 2001 at station Peabody 0.5 (Peabody u/s of Peabody St).

Streamkeepers of Clallam County unpublished data show a geometric mean of 86 cfu/100mL from 1 samples collected in 2001 at station Peabody 0.6 (Peabody d/s of 5 St. Culvert).

Streamkeepers of Clallam County unpublished data show a geometric mean of 22 cfu/100mL from 2 samples collected in 2001 at station Peabody 0.9 (Peabody u/s of 8 St.).

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WRIA Listing ID Category 98 List? Waterbody Name **Location Information** Parameter Medium

Basis

Remarks

Streamkeepers of Clallam County unpublished data show a geometric mean of 21 cfu/100mL from 2 samples collected in 2001 at station Peabody 1.0 (Peabody @ 9th St).

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Peabody 0.0 shows in 2000, 2 of 3 samples (66.7%) exceeded the percentile criterion: in 2001, 2 of 3 samples (66.7%) exceeded the percentile criterion.

Streamkeepers of Clallam County unpublished data show a geometric mean of 69 cfu/100mL from 3 samples collected in 2000 at station Peabody 0.0 (Peabody @ mouth).

Streamkeepers of Clallam County unpublished data show a geometric mean of 102 cfu/100mL from 2 samples collected in 2000 at station Peabody 0.2 (Peabody @ 2nd St).

Streamkeepers of Clallam County unpublished data show a geometric mean of 22 cfu/100mL from 2 samples collected in 1999 at station Peabody 0.0 (Peabody @ mouth).

10312 5 Υ PORT ANGELES HARBOR

48.135 Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station PAH003 (Port Angeles Harbor - Ediz Hook Head) shows excursions beyond the criterion in 2001

123.465

Considered for removal from Category 5, but

and 2002.

390KRD

48123B4D6

Albertson 2005, analyses at the 20 meter depth suggest

further research of available literature, see BPJ Albertson

Water

2005, and SAIC 1999. 03/07/05 -kk

could be additional anthropogenic effect on the DO concentrations of upwelled water entering the bay.

SAIC 1999, accumulation of wood waste contributes to apparent high sediment oxygen demand, degraded benthic habitat (OSI less than zero) was observed in the near shore areas of the western harbor, bacterial mats indicating

loading and low dissolved oxygen conditions were observed

the western harbor.

Floyd Snider McCarthy, Inc. and Evans-Hamilton, 2002, suggests that low dissolved oxygen concentrations are directly tied to conditions in the Strait of Juan de Fuca. The data indicate that tidal flushing rates in Port Angeles Harbor supply or remove much more oxygen than the oxygen demand that may be caused by human factors.

organic

in

there

retained upon

SIEBERT CREEK, W.F. 18 42979 5 Ν

SF89WR 3.254 29N 05W 22

Dissolved oxygen

Dissolved oxygen

Water

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Siebert WF 2.3 shows 3 samples beyond the criterion collected on the following days: 7/26/2001, 9/24/2001, 8/27/2002.

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WRIA	Listing ID Catego	ory 98	3 List?	Waterbody Name Basis	Location Ir	nformation			Parameter	Remarks	Medium
18	40377	<b>5</b>	N	STRAIT OF JUAN DE FUCA (EAST)  Department of Health unpublished data collected from station DUNGENESS BAY-104 show samples exceed the percentile criterion with the last sample collected on 19-Dec-2001.  Department of Health unpublished data collected from station DUNGENESS BAY-105 show samples exceed the percentile criterion with the last sample collected on 19-Dec-2001.	Ü					m	Water
18	40379	<b>5</b>	N	STRAIT OF JUAN DE FUCA (EAST)  Department of Health unpublished data collected from station DUNGENESS BAY-106 show samples exceed the percentile criterion with the last sample collected on 19-Dec-2001.	390KRD a geometric	<b>48123B1G4</b> c mean of 7 cfu/	<b>48.165</b> 100mL and	<b>123.145</b> 17.8571428571	Fecal Colifor 429% of	m	Water
18	40380	5	N	STRAIT OF JUAN DE FUCA (EAST)  Department of Health unpublished data collected from station DUNGENESS BAY-107 show samples exceed the percentile criterion with the last sample collected on 19-Dec-2001.  Department of Health unpublished data collected from station EAST STRAITS-116 show a g percentile criterion with the last sample collected on 8-Nov-2001.						rm	Water
18	40382	<b>5</b>	N	STRAIT OF JUAN DE FUCA (EAST)  Department of Health unpublished data collected from station DUNGENESS BAY-109 show samples exceed the percentile criterion with the last sample collected on 19-Dec-2001.	390KRD a geometric	<b>48123B1G6</b> c mean of 6 cfu/	<b>48.165</b> 100mL and	<b>123.165</b> 10.7142857142	Fecal Colifor 2857% of	rm	Water
18	40384	<b>5</b>	N	STRAIT OF JUAN DE FUCA (EAST)  Department of Health unpublished data collected from station DUNGENESS BAY-111 show samples exceed the percentile criterion with the last sample collected on 19-Dec-2001.	390KRD a geometric	<b>48123B1F6</b> c mean of 5 cfu/	<b>48.155</b> 100mL and	<b>123.165</b> 14.2857142857	Fecal Colifor 7143% of	rm	Water
18	40385	<b>5</b>	N	STRAIT OF JUAN DE FUCA (EAST)  Department of Health unpublished data collected from station DUNGENESS BAY-112 show samples exceed the percentile criterion with the last sample collected on 19-Dec-2001.	390KRD a geometric	<b>48123B1E7</b> c mean of 5 cfu/	<b>48.145</b> 100mL and	<b>123.175</b> 10.7142857142	Fecal Colifor 2857% of	rm	Water
18	40386	<b>5</b>	N	STRAIT OF JUAN DE FUCA (EAST)  Department of Health unpublished data collected from station DUNGENESS BAY-113 show samples exceed the percentile criterion with the last sample collected on 19-Dec-2001.	390KRD a geometric	<b>48123B1F3</b> c mean of 9 cfu/	<b>48.155</b> 100mL and 2	<b>123.135</b> 21.4285714285	Fecal Colifor	rm	Water
18	40387	<b>5</b>	N	STRAIT OF JUAN DE FUCA (EAST)  Department of Health unpublished data collected from station DUNGENESS BAY-114 show samples exceed the percentile criterion with the last sample collected on 19-Dec-2001.	390KRD a geometric	<b>48123B1F2</b> c mean of 7 cfu/	<b>48.155</b> 100mL and	<b>123.125</b> 10.7142857142	Fecal Colifor 2857% of	rm	Water

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**TUMWATER CREEK** 21484 5 Ν ZY80RT 0 30N 06W 01 **Fecal Coliform** Water

> Streamkeepers of Clallam County unpublished data show a geometric mean of 26 cfu/100mL from 2 samples collected in 2003 at station Tumwater 0.1 (Tumwater u/s of Marine Dr).

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Streamkeepers of Clallam County unpublished data show a geometric mean of 34 cfu/100mL from 5 samples collected in 2002 at station Tumwater 0.1 (Tumwater u/s of Marine Dr).

Streamkeepers of Clallam County unpublished data show a geometric mean of 69 cfu/100mL from 6 samples collected in 2001 at station Tumwater 0.1 (Tumwater u/s of Marine Dr).

Streamkeepers of Clallam County unpublished data show a geometric mean of 107 cfu/100mL from 5 samples collected in 2000 at station Tumwater 0.1 (Tumwater u/s of Marine Dr).

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Tumwater 0.1 shows in 2000, 2 of 4 samples (50.0%) exceeded the percentile criterion.

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Tumwater 0.4 shows in 2001, at least one sample exceeded the criterion.

Streamkeepers of Clallam County unpublished data show a geometric mean of 14 cfu/100mL from 4 samples collected in 2001 at station Tumwater 0.4 (Tumwater @d/s end of Truck Rt culvert).

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Tumwater 0.6 shows in 2001, at least one sample exceeded the criterion.

Streamkeepers of Clallam County unpublished data show a geometric mean of 8 cfu/100mL from 1 samples collected in 2002 at station Tumwater 0.6 (Tumwater d/s of 8 St.).

Streamkeepers of Clallam County unpublished data show a geometric mean of 8 cfu/100mL from 4 samples collected in 2001 at station Tumwater 0.6 (Tumwater d/s of 8 St.).

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Tumwater 0.8 shows in 2003, at least one sample exceeded the criterion.

Streamkeepers of Clallam County unpublished data show a geometric mean of 14 cfu/100mL from 4 samples collected in 2001 at station Tumwater 0.8 (Tumwater nr. 11 St., d/s of storm outflow channel).

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Tumwater 0.8a shows in 2002, at least one sample exceeded the criterion.

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Turnwater 0.8b shows in 2001 and 2003 at least one sample exceeded the criterion.

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Tumwater 0.8c shows in 2002, at least one sample exceeded the criterion.

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Tumwater 0.8d2 shows in 2001, at least one sample exceeded the criterion.

Streamkeepers of Clallam County data (submitted by Ed Chadd on 03/15/04), station Turnwater 0.8e shows in 2001 and 2003 at least one sample exceeded the criterion.

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18 9927 5 N UNNAMED CREEK FI52VB 1.054 30N 04W 01 Fecal Coliform Water

Sargeant (2002) station HC0.2 (HC0.2) shows the geometric mean of 8 does not exceed the criterion and that 0 % of the samples does not exceed the percentile criterion from 5 samples collected during 1999.; Sargeant (2002) station HC0.2 (HC0.2) shows the geometric mean of 15 does not exceed the criterion and that 13 % of the samples exceeds the percentile criterion from 15 samples collected during 2000.;

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